

What is Claimed is:

1. A three-axis vehicle hitch comprising:
 - a first yoke having a first base and a first pair of spaced apart arms
extending perpendicularly from the base;
 - 5 a second yoke having a second base and a second pair of spaced
apart arms extending perpendicularly from the base;
 - the first and second bases pivotally attached for rotation around a first
axis that is parallel to the first and second pairs of spaced apart arms;
 - the first pair of spaced apart arms having a connector adapted for
10 pivotably receiving a rearwardly extending first hitch member of a first vehicle;
 - the second pair of spaced apart arms having a connector adapted for
pivotably receiving a forwardly extending second hitch member of a second
vehicle; and,
 - the first and second yokes operable to connect the first and second
15 vehicles and to provide relative movement in three axes between the first and
second vehicles.
2. A three-axis vehicle hitch according to claim 1 further comprising the
first and second bases having respective first and second holes formed therethrough,
20 and a first connector passing through the first and second holes to rotatably connect
the first and second bases.

3. A three-axis vehicle hitch according to claim 2 wherein the first connector is selected from the group consisting of a bolt, a pin, and a washer.
4. A three-axis vehicle hitch according to claim 3 wherein the connector
5 includes a bolt, a nut, and first and second washers.
5. A three-axis vehicle hitch according to claim 1 further comprising a washer between the first and second spacers.
- 10 6. A three-axis vehicle hitch according to claim 1 further comprising the first and second pairs of spaced apart arms each having coaxial transverse holes formed therein, and a retainer releasably mounted therein.
7. A three-axis vehicle hitch according to claim 2 further comprising the
15 first and second pairs of spaced apart arms each having coaxial transverse holes formed therein, and a retainer releasably mounted therein.
8. A three-axis vehicle hitch according to claim 2 further comprising:
a rearwardly extending first hitch member of a first vehicle pivotably
20 mounted in the first pair of spaced apart pair of arms; and,
a forwardly extending second hitch member of a second vehicle pivotably mounted in the second pair of spaced apart arms.

9. A three-axis vehicle hitch according to claim 1 further comprising the first and second bases rotatable at least 90 degrees relative to one another.
10. A three-axis vehicle hitch according to claim 1 further comprising the first and second bases rotatable at least 180 degrees relative to one another.
11. A three-axis vehicle hitch according to claim 1 further comprising the first and second bases rotatable at least 360 degrees relative to one another.
12. A three-axis vehicle hitch according to claim 8 further comprising the first and second hitch members pivotable at least 90 degrees relative to the respective first and second yokes.
13. A three-axis vehicle hitch according to claim 8 further comprising the first and second hitch members pivotable at least 180 degrees relative to the respective first and second yokes.
14. A three-axis vehicle hitch according to claim 8 further comprising the first and second hitch members pivotable at least 360 degrees relative to the respective first and second yokes.
15. A three-axis vehicle hitch comprising:

a first yoke having a first base and a first pair of spaced apart arms
extending perpendicularly from the base;

a second yoke having a second base and a second pair of spaced
apart arms extending perpendicularly from the base;

5 the first and second bases pivotally attached for rotation around a first
axis that is parallel to the first and second pairs of spaced apart arms;

the first pair of spaced apart arms having a connector adapted for
pivotably receiving a rearwardly extending first hitch member of a first vehicle;

10 the second pair of spaced apart arms having a connector adapted for
pivotably receiving a forwardly extending second hitch member of a second
vehicle;

the first and second yokes operable to connect the first and second
vehicles and to provide relative movement in three axes between the first and
second vehicles; and,

15 the first and second bases having respective first and second holes
formed therethrough, and a first connector passing through the first and second
holes to rotatably connect the first and second bases.